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**REMARKS**

Reconsideration and withdrawal of the rejection of the claims is respectfully requested.

Prior to the present response, claims 9-11 and 14-20 were pending. By way of the above amendments, claims 15, 16 and 20 are canceled without prejudice or disclaimer. Therefore, claims 9-11, 14 and 17-19 shall be pending upon entry of these amendments. It is respectfully submitted that the present amendments should be entered because they only involve canceling claims, and thus serve to simplify the issues for appeal without introducing subject matter that would require further consideration or search.

On page 2 of the Office Action, the Examiner states that claim 19 has been withdrawn from consideration for allegedly being drawn to a non-elected invention. In setting forth the reasons for withdrawing claim 19, the Examiner provides only the following conclusory statement: "the multi-chamber system which is used to form the phthalocyanine and expose the hole injection layer to oxygen gas is independent, distinct, and unobvious from the previously rejected claims" (page 2, section 3). It is respectfully submitted, however, that the withdrawal of a claim from examination based solely on such a conclusion is improper without a showing of *why* alleged inventions are considered independent and distinct. See MPEP §803.01, which instructs that "Examiners must provide reasons and/or examples to support conclusions ..." (emphasis added). In the present case, however, the Examiner provides only a conclusion regarding independence, distinctness or unobviousness.

Furthermore, the MPEP §803 sets forth how the Patent Office interprets the meaning of "independent": The term 'independent' (i.e., not dependent) means "there is no disclosed relationship between the two or more subjects disclosed, that is, they are unconnected in design, operation or effect ...." The Examiner, however, does not address, with any particularity, why the claims should be considered to be drawn to independent inventions. Also, the MPEP defines the term "distinct" to mean "two or

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more subjects as disclosed are related, for example, as combination and part (subcombination) thereof, process and apparatus for its practice, process and product made, etc., but capable of separate manufacture, use, or sale as claimed..." *Id.* However, the Action makes no mention of whether the inventions are related and why such hypothetical related inventions should be considered patentably distinct.

Additionally, the MPEP states that for restriction to be proper, a showing of serious burden on the Examiner must be made. It is respectfully submitted that the Examiner provides no such showing.

For at least these reasons, Applicant submits that the Examiner's withdrawal of claim 19 is improper. As such, Applicants request that claim 19 be rejoined with claims 9-11, 14, 17 and 18, and that all claims be allowed for the following reasons:

On pages 3-5 of the Office Action, claims 9-11 and 14-18 were rejected under 35 U.S.C. 103 as allegedly being obvious over the Ogawa et al. patent publication. This rejection is respectfully traversed.

MPEP §2143 states that to establish a *prima facie* case of obviousness, three basic criteria must be met. Two of the stated criteria are the references relied upon, or the knowledge generally available to one of ordinary skill in the art, must teach or suggest each and every claimed feature, and that there must be some suggestion or motivation, either in the references themselves, or in the knowledge of persons of ordinary skill in the prior art, to modify the references or to combine reference teachings. It is respectfully submitted that neither the Ogawa patent publication, nor any allegations by the Examiner of what is known in the art, teach or suggest the specific combination of features recited in independent claims 9 and 17, which include exposing the hole injection layer to oxygen gas. Furthermore, the rejection fails to provide any teaching or suggestion from the Ogawa publication, or what is allegedly known in the art, that would have suggested this feature as recited in combination with the other features of the independent claims.

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Before proceeding, it is to be noted that the cancellation of claims 15 and 16 renders moot the rejection of these claims.

Turning now to independent claim 9, in response to Applicant's argument on page 6 of the January 18, 2005 response that the Ogawa patent publication fails to disclose, teach or otherwise suggest exposing the hole injection layer to oxygen gas as recited in independent claim 9, the Examiner points to paragraph 0022 in the "Response to Arguments" section of the Action. Specifically, the Examiner asserts this paragraph of Ogawa "infers that any gas capable of oxidizing CuPc may be used" (page 6, lines 7-8). However, to the extent that the machine translation could be considered an accurate rendering of the Ogawa disclosure<sup>1</sup>, the undersigned has carefully reviewed paragraph 0022 and submits that it does not mention or suggest use of *any* gas capable of oxidizing CuPc, as alleged by the Examiner, much less the claimed feature of *exposing a hole injection layer to oxygen gas*. Rather, the Ogawa publication discloses a treatment for a hole injecting film using only NO<sub>2</sub> gas or some combination of N<sub>2</sub> and NO<sub>2</sub> gases. The Examiner goes on to assert, "One of ordinary skill in the art *will be able* to select an equivalent oxidizing gas, especially a gas as well known and used for oxidizing purposes as oxygen gas" (see, page 6, lines 8-10). However, the rejection contains no reference teaching of exposing a hole injection layer to oxygen gas, as set forth in claim 9. Furthermore, the mere allegation by the Examiner that oxygen is a known oxidizer is too general, and thus does not suggest the specific combination of claimed features, which includes *exposing the hole injection layer to oxygen gas*.

<sup>1</sup> See, page 4 of the APPA paper by Ichio Shamoto, "Creation of a Universal Database – Problems and Advantages," presented at the AIPLA/FICPI Colloquium, April 2003, which discusses difficulties encountered when attempting to study original documentation uncovered as a result of a search of English language abstracts: "In relation to this problem, there has been expressed the idea of relying on machine translation. However, while such translation is able to provide a rudimentary map of a document, and might, for example, be applicable in translating simple abstracts, it is not a proper means for use in translating full documentation. If machine translation is relied upon for such documentation, without doubt, misinterpretation of documents as a result of improper translation will frequently occur. It is neither realistic nor possible to rely on machine translation, which at best, can provide a literal translation of nouns, noun phrases, and formulated syntax."

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The Examiner's arguments are predicated on a holding of *In re Leshin*, 125 USPQ 416, which involved an assertion by the Appellant that his molded container was made of plastic and the plastic was selected for Appellant's particular purpose. The Leshin court held that since one of the references relied upon by the Examiner (the Anderson patent) taught a similar container made of plastic, and because Appellant conceded that the plastics he uses were well known, mere selection of known plastics to make a container-dispenser of the type made of plastics prior to the invention would have been obvious. However, such is not the situation present case. As pointed out above, the rejection provides no teaching or suggestion of the claimed feature of *exposing a hole injection layer to oxygen gas*. Hence, the statements by the Examiner are based on conjecture or, at best, reliance on the "level of skill in the art," which cannot substitute for the factual evidence required to establish a *prima facie* case of obviousness. See MPEP §2143.01.

As neither the Ogawa patent publication nor the Examiner's allegation concerning what "one of ordinary skill in the art will be able to select" (see section 20 on page 6), and his baseless statement regarding "material availability and manufacturing processes with sensitive requirements" (see section 9 spanning pages 3 to 4) provide proper motivation for the proposed modification of the Ogawa device, it is respectfully submitted that the Examiner's conclusions could only have been arrived at after having first viewed Applicant's own disclosure and then using Applicant's disclosure to fill in gaps existing in the applied prior art with respect to claimed subject matter. Of course, such hindsight reasoning is impermissible.

Additionally, inherent differences between O<sub>2</sub> and NO<sub>2</sub> would not have led one of ordinary skill in the art to consider these gases equivalents, as alleged by the Examiner. O<sub>2</sub> has a number of advantages over NO<sub>2</sub>. For instance, O<sub>2</sub> gas is not an acid gas like NO<sub>2</sub> gas. Being an acid gas, NO<sub>2</sub> may have adverse effects on an electroluminescence (EL) element. For example, nitric acid would form if NO<sub>2</sub> gas were to react with H<sub>2</sub>O. Nitric acid so formed may degrade organic layers of an EL

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element. Another advantage of O<sub>2</sub> is that it is smaller than NO<sub>2</sub>. Consequently, O<sub>2</sub> will enter into a thin film (e.g., CuPc) more easily than NO<sub>2</sub>. It is believed this advantage further promotes the improvement of the film quality of phthalocyanine (e.g., see the substitute specification, page 4, lines 1-5).

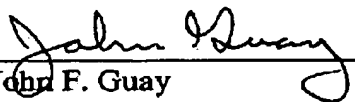
For at least these reasons, one of ordinary skill in the art would not have been led to the modify the device of Ogawa reference as proposed to arrive at the combination of specific features set forth in independent claim 9. Withdrawal of the rejection, therefore, is believed warranted.

Similar distinctions are recited in independent claim 17. For example, claim 17 recites, among other features, "exposing said hole injection layer to oxygen gas after forming said hole injection layer." Because the Examiner rejected claim 17 for the same reasons given with respect to claim 9, it is respectfully submitted that claim 17 also is allowable for above reasons.

Claims 10, 11, 14 and 18 are allowable at least because these claims depend from one of allowable independent claims 9 and 17. Additionally, these dependent claims recite combinations including additional features not taught or suggested by the Ogawa patent publication.

Based on the foregoing, the rejection of the claims fails to establish a *prima facie* case of obviousness. As such, the rejection of claims 9-11, 14 and 17-18 should be withdrawn and all pending claims allowed without further delay.

Respectfully submitted,

  
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